

# CONTINUOUS GRANULATOR DRYER DRUVATHERM® CGT



- Combination of convection and contact drying
- Process at low temperatures
- Gentle treatment of the product
- Granulation process possible at the same time
- Reliable reproducibility of product quality
- Suitable for stripping process
- High availability of the system



## **ALWAYS THE RIGHT MIX**



DRUVATHERM<sup>®</sup> CGT with complete insulation

The CGT is designed for continuous operation. The special feature of this dryer is to combine contact and convection drying (aeration drying). Due to the extended residence time, products are gently dried at low temperatures. At the same time excellent granulation can be achieved. The CGT is particularly suitable for drying and for applications with products with problematic flowability and changing consistence (multiphase process).

We develop tailor-made solutions optimally adapted to each of your applications and products for a long-term production. Consequent process design and extensive basic engineering ensure economic global solution.

The sizes range from 300 l drum volumes for pilot-scale, and from 600 l up to 10.300 l drum volumes for production units.

#### **Range of Application**

- Production of cellulose ether, for example cooling and granulation of methyl cellulose
- Stripping and drying of polysaccharide containing solvents
- Drying of chemical products, fibrous products and molding compounds
- Production of starch, guar and tamarind derivates, for example dextrination and cationization of starch



DRUVATHERM® CGT 6.200

#### **Mode of Operation**

The granulation dryer operates on the principle of a mechanically generated fluid bed introduced by Lödige which also generate an efficient drying of the product.

This intensive mixing effect achieves separation of particles in the fluid bed generating large product surfaces and prevents the development of temperature and moisture gradients in the product bed. The heat exchange via the heat drum walls is significantly increased.

The product behaviour during drying is influenced by the geometry of the mixing tools and the high speed choppers; the average product residence time and the distribution of the residence time can be controlled in this way. A defined particle size spectrum can be achieved during the granulation process.

The system achieves contact drying under normal pressure or under inert atmosphere as well as convection/contact drying in direct and counter flow. The supply of thermal energy is performed by using heat transfer agents (water, vapour, oil) circulating inside the heating jacket in contact with the product.

In case of convection drying, hot gases (air, nitrogen) circulate directly through the machine drum.



Discharge weir in open position



Discharge weir in closed position

### Gebrüder Lödige Maschinenbau GmbH Elsener Straße 7–9 33102 Paderborn

Telefon: +49 5251 309-0 Telefax: +49 5251 309-123 E-Mail: info@loedige.de